

U.S. Serial No. 09/967,265
Reply to Office Action of: 06/11/2003
Family Number: P2000J093-US2

Page 2 of 22

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for controlling the formation of injector deposits in a gasoline direct injection internal combustion engine by combusting in said engine a fuel comprising gasoline containing from about 12 to about 65 vol% aromatics wherein the source of the aromatics is selected from the group consisting of reformat~~e~~, comprises a fluid cat cracker stream and mixtures of reformat~~e~~e and a fluid cat cracker stream, wherein with respect to the fluid cat cracker stream having~~e~~a light fluid cat cracker stream fraction in an amount of from about 70% to about 100% of~~e~~ constitutes the fluid cat cracker stream.

2. (Original) The method of claim 1 wherein the light fluid cat cracker stream constitutes about 85% to 100% of the fluid cat cracker stream.

3. (Original) The method of claim 1 wherein the light fluid cat cracker stream constitutes about 95% to 100% of the fluid cat cracker stream.

4. (Currently Amended) In a method for controlling the formation of injector tip deposits in a gasoline direct injection internal combustion engine by combusting in the engine a fuel comprising gasoline characterized by having a T₉₀ in the range of about 150 to 182°C, an olefins content in the range of about 3.6 to 20 vol%, a sulfur content in the range of about 5 to 400 ppm and an aromatics content in the range of about 10-45 vol%, the improvement comprising using as the source of aromatics a stream comprising selected from the group consisting of reformat~~e~~, a fluid cat cracker stream and mixtures of reformat~~e~~e and a fluid cat cracker stream, wherein with respect to the fluid cat cracker stream having~~e~~a light fluid cat cracker stream fraction in an amount of from about 70 to 100% of~~e~~ constitutes the fluid cat cracker stream.

U.S. Serial No. 09/967,265
Reply to Office Action of: 06/11/2003
Family Number: P2000J093-US2

Page 3 of 22

5. (Original) The method of claim 4 wherein the light fluid cat cracker stream constitutes about 85 to 100% of the fluid cat cracker stream.

6. (Original) The method of claim 4 wherein the light fluid cat cracker stream constitutes about 95 to 100% of the fluid cat cracker stream.

7. (Previously Amended) The method of claim 1, 2, 3, 4, 5 or 6 wherein the aromatics source comprises a mixture of reformate and fluid cat cracker stream in a ratio of about 100:0 to 25:75.

8. (Currently Amended) The method of claim 7 wherein the aromatics ~~in the fuel are attributable to source is~~ a mixture of reformate and fluid cat cracker stream in a ratio of about 100:1 to 75:25.

9. (Currently Amended). The method of claim 1 or 4 wherein the aromatics ~~in the fuel are attributable to source is~~ reformate.

10. (New) The method of claim 1, 2, 3, 4, 5 or 6 wherein the light fluid cat cracker stream is characterized as having an initial boiling point in the range of about 90°F to 100°F, a T₁₀ in the range of about 130°F to 150°F, a T₉₀ in the range of about 280°F to 300°F, and a final boiling point in the range of about 330°F to 350°F.

11. (New) The method of claim 1, 2, 3, 4, 5 or 6 wherein the reformate stream is characterized as having a RON of about 95 to 105, an initial boiling point in the range of about 90°F to 95°F, a T₁₀ in the range of about 140°F to 145°F, a T₉₀ in the range of about 310°F to 320°F, a final boiling point in the range of about 400°F to 430°F, and an aromatics content of about 40% to 70%.